Ben Edward Thomas Miller Door and Trim, Inc. 1702 East Monroe Street Goshen, Indiana 46526

Re: **039-12945** 

Minor Source Modification to:

Part 70 Operating Permit No.: T 039-7365-00155

Dear Mr. Thomas:

Miller Door and Trim, Inc. was issued Part 70 operating permit **T 039-7365-00155** on September 24, 1998 for a stationary door, wood trim and furniture manufacturing plant. An application to modify the source was received on November 2, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

One (1) automatic molding sprayer coating operation, equipped with three (3) dry filters in series, equipped with nine (9) HVLP spray applicators, exhausted through Stack F, to be installed in 2001, capacity: 3,000 liner feet of wood door trim per hour (filters do not have to be in operation at all times).

and the following insignificant activity

One (1) sanding machine, equipped with a baghouse for PM control, to be installed in 2001, capacity: 6,000 linear feet of wood door trim per hour (baghouse does not have to be in operation at all times).

The following construction conditions are applicable to the proposed project:

#### General Construction Conditions

- The data and information supplied with the application shall be considered part of this source modification approval. Prior to <u>any</u> proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. Effective Date of the Permit

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

- 5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
- 6. Pursuant to 326 IAC 2-7-10.5(I) the emission units constructed under this approval shall <u>not</u> be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(I)(1) and 326 IAC 2-7-11.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact Mark L. Kramer, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

Attachments MLK/MES

cc: File - Elkhart County

U.S. EPA, Region V

Elkhart County Health Department

Northern Regional Office

Air Compliance Section Inspector - Greg Wingstrom

Compliance Data Section - Karen Nowak

Administrative and Development - Janet Mobley

Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

### Miller Door and Trim, Inc. 1702 East Monroe Goshen, Indiana 46526

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: <b>T 039-7365-00155</b>	
Issued by: Felicia R. George, Assistant Commissioner Office of Air Management	Issuance Date: September 24, 1998

First Minor Permit Modification 039-10393-00155	Pages Affected: 2, 3, 16, 17, 25, 26, 27, and 28 of 35
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: March 4, 1999

First Minor Source Modification 039-12945-00155	Pages Affected: 5, 25 - 28, 30a and 35a	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:	

Miller Door and Trim, Inc. Page 2 of 35 Goshen, Indiana OP No. T-039-7365-00155

Reviewer Name: Melissa Groch

Reviewer Name: Melissa Groch

#### **TABLE OF CONTENTS**

SECTION A		
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	5
SECTION B	GENERAL CONDITIONS	
B.1	Permit No Defense [326 IAC 2-1-10] [IC 13]	
B.2	Definitions [326 IAC 2-7-1]	
B.3	Permit Term [326 IAC 2-7-5(2)]	
B.4	Enforceability [326 IAC 2-7-7(a)]	
B.5	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.6	Severability [326 IAC 2-7-5(5)]	
B.7	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.8	Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] .	
B.9	Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]	
B.10	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]	
B.11	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.12	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [ IAC 1-6-3]	
B.13	Emergency Provisions [326 IAC 2-7-16]	
B.14		
B.15	Multiple Exceedances [326 IAC 2-7-5(1)(E)]	
B.16	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.17	• • • • • • • • • • • • • • • • • • • •	
	[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]	. 12
B.18	Permit Renewal [326 IAC 2-7-4]	
B.19	Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]	
B.20	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]	
	[326 IAC 2-7-12 (b)(2)]	. 13
B.21	Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]	. 13
B.22	Operational Flexibility [326 IAC 2-7-20]	. 14
B.23	Construction Permit Requirement [326 IAC 2]	. 15
B.24	Inspection and Entry [326 IAC 2-7-6(2)]	. 15
B.25	Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]	. 16
B.26	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]	. 16
B.27	Enhanced New Source Review [326 IAC 2]	
SECTION C	SOURCE OPERATION CONDITIONS	
Emis	ssion Limitations and Standards [326 IAC 2-7-5(1)]	
C.1	Major Source	. 17
C.2	Particulate Matter Emission Limitations For Processes with Process Weight	
	Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]	. 17
C.3	Opacity [326 IAC 5-1]	
C.4	Open Burning [326 IAC 4-1] [IC 13-17-9]	. 17
C.5	Incineration [326 IAC 4-2][326 IAC 9-1-2]	
C.6	Fugitive Dust Emissions [326 IAC 6-4]	
C.7	Operation of Equipment [326 IAC 2-7-6(6)]	
C.8	Stack Height [326 IAC 1-7]	. 17

Miller Door and Trim, Inc.

Goshen, Indiana

Reviewer Name: Melissa Groch

	C.9	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]	17
	Testin	g Requirements [326 IAC 2-7-6(1)]	
	C.10	Performance Testing [326 IAC 3-6]	18
		iance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]C.11	10
	C.11	Compliance Schedule [326 IAC 2-7-6(3)]	
	C.12	Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	
	C.13	Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]	
	C.14	Monitoring Methods [326 IAC 3]	20
	Correc	ctive Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]	
	C.15	Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]	20
	C.16	Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6][326 IAC 1-6]	20
	C.17	Actions Related to Noncompliance Demonstrated by a Stack Test[326 IAC 2-7-5]	
		[326 IAC 2-7-6]	21
	Recor	d Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]	
	C.18	Emission Statement [326 IAC 2-7-5(3)][326 IAC 2-7-5(7)][326 IAC 2-7-19][326 IAC 2-6] .	22
	C.19	Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]	
	C.20	General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]	
	C.21	General Reporting Requirements [326 IAC 2-7-5(3)(C)]	
		spheric Ozone Protection	
	C.22	Compliance with 40 CFR 82 and 326 IAC 22-1	24
SECTI	ON D.1	FACILITY OPERATION CONDITIONS - Surface Coating Operations	25
	Emiss	ion Limitations and Standards [326 IAC 2-7-5(1)]	
	D.1.1	Particulate Matter (PM) [326 IAC 6-3-2(c)]	25
	D.1.2	Volatile Organic Compounds (VOC) [326 IAC 8-2-12]	25
	D.1.3	Usage Limit	
	D.1.4	Volatile Organic Compounds (VOC) [326 IAC 2-7-10.5(d)(5)]	
	D.1.5	New Source Toxics Control [326 IAC 2-4.1-1]	
	D.1.6	Preventive Maintenance Plan [326 IAC 2-7-5(13)]	
		·	
		liance Determination Requirements	
	D.1.7	Testing Requirements [326 IAC 2-7-6(1),(6)]	
	D.1.8	VOC Emissions	26
	Compl	iance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]	
	D.1.9	Particulate Matter (PM)	26
	D.1.10	Monitoring	26
		d Keeping and Reporting Requirements [326 IAC 2-7-5(3)]	
		Record Keeping Requirements	
	D.1.12	Reporting Requirements	28
	SECTION	ON D.2 FACILITY OPERATION CONDITIONS - Woodworking Operations	29
	Emico	ion Limitations and Standards [326 IAC 2-7-5(1)]	

Miller Door and Trim, Inc.First Minor Source ModificationPage 3 of 35Goshen, Indiana039-12945-00155OP No. T 039-7365-00155Reviewer Name: Melissa GrochAmended by: MES

D.2.1	Particulate Matter (PM)	326 IAC 6-3]	. 29
D.2.2	Preventive Maintenance	Plan [326 IAC 2-7-(13)]	. 29

Miller Door and Trim, Inc. Goshen, Indiana Reviewer Name: Melissa Groch

#### First Minor Source Modification 039-12945-00155 Amended by: MES

Page 4 of 35 OP No. T 039-7365-00155

	•	Iiance Determination Requirements         Testing Requirements [326 IAC 2-7-6(1),(6)]	29
SECTIO	N D.3	FACILITY OPERATION CONDITIONS - Insignificant Activity	0a
		ion Limitations and Standards [326 IAC 2-7-5(1)]	
EMERG SEMI-A COMPL	ENCY/ NNUAL IANCE	ON FORM /DEVIATION FORM L REPORT FORM E MONITORING REPORT FORM REPORT FORM	32 33 35

Miller Door and Trim, Inc. Goshen, Indiana First Minor Source Modification 039-12945-00155 Amended by: MES Page 5 of 35

OP No. T 039-7365-00155

Reviewer Name: Melissa Groch

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary door, wood trim and furniture manufacturing plant.

Responsible Official: Mr. Ed Thomas

Source Address: 1702 East Monroe, Goshen, IN 46526
Mailing Address: 1702 East Monroe, Goshen, IN 46526

SIC Code: 2499 County Location: Elkhart

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD

Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)] This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) surface coating booths, identified as B1 and B2, each with three (3) airless and air assisted airless spray guns. Emissions shall be controlled by dry filter, then exhausted at Stack/Vent ID #S1, S2, S3, S4, and S5.
- (b) One (1) automatic molding sprayer coating operation, equipped with three (3) dry filters in series, equipped with nine (9) HVLP spray applicators, exhausted through Stack F, to be installed in 2001, capacity: 3,000 liner feet of wood door trim per hour (filters do not have to be in operation at all times).
- (c) Woodworking Operations with a maximum rating of 1000 pounds per hour. Emissions shall be controlled by baghouse dust collector and vented to the interior of the building.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

  This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

One (1) sanding machine, equipped with a baghouse for PM control, to be installed in 2001, capacity: 6,000 linear feet of wood door trim per hour (baghouse does not have to be in operation at all times).

#### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection

Page 25 of 35 OP No. T 039-7365-00155

Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]: Surface Coating Operations

- (a) Two (2) surface coating booths, identified as B1 and B2, each with three (3) airless and air assisted airless spray guns. Emissions shall be controlled by dry filter, then exhausted at Stack/Vent ID #S1, S2, S3, S4, and S5.
- (b) One (1) automatic molding sprayer coating operation, equipped with three (3) dry filters in series, equipped with nine (9) HVLP spray applicators, exhausted through Stack F, to be installed in 2001, capacity: 3,000 liner feet of wood door trim per hour (filters do not have to be in operation at all times).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3-2, the PM from each of the two (2) paint booths, identified as B1 and B2 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the automatic molding sprayer coating operation shall not exceed 4.48 pounds per hour when operating at a process weight rate of 2,283 pounds per hour (1.14 tons per hour).

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furnishings shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

Miller Door and Trim, Inc. Goshen, Indiana Reviewer Name: Melissa Groch First Minor Source Modification 039-12945-00155 Amended by: MES Page 25 of 35 OP No. T 039-7365-00155 Reviewer Name: Melissa Groch

Page 26 of 35 OP No. T 039-7365-00155

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.3 Usage Limit

To avoid applicability of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14 (40 CFR Part 63, Subpart JJ), the surface coating booths, identified as B-1 and B-2, and the automatic molding sprayer coating operation shall use no more than one hundred (100) gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. This limit is established in the definition of an incidental wood furniture manufacturer, pursuant to 40 CFR Part 63, Subpart JJ.

#### D.1.4 Volatile Organic Compounds (VOC) [326 IAC 2-7-10.5(d)(5)]

Pursuant to 326 IAC 2-7-10.5(d)(5), the potential to emit VOC from the automatic molding sprayer coating operation is limited to less than twenty-five (25) tons per twelve (12) consecutive month period. Compliance with this VOC emission limit also makes the requirements of 326 IAC 2-2 not applicable.

#### D.1.5 New Source Toxics Control [326 IAC 2-4.1-1]

Any change or modification which may increase potential single and combination of HAPs emissions to 10 and 25 tons per year, respectively, from the automatic molding sprayer coating operation shall obtain prior approval from IDEM, OAM before such change may occur.

#### D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

#### **Compliance Determination Requirements**

#### D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the limit specified in Condition D.1.1 shall be determined by performance tests conducted in accordance with Section C- Performance Testing.

#### D.1.8 VOC Emissions

Compliance with Conditions D.1.3 and D.1.4 shall be demonstrated within 30 days of the end of each month based on the total finishing material or adhesives used in the manufacture of wood furniture or wood furniture components and the volatile organic compound usage for the month.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.9 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times in order to comply with Condition D.1.1(a) when the two (2) paint booths, identified as B1 and B2 are in operation.

#### D.1.10 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Reviewer Name: Melissa Groch

Page 27 of 35 OP No. T 039-7365-00155

Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)]

#### D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, the Permittee shall maintain on site records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be complete and sufficient to establish compliance with the usage limits established in Condition D.1.3.
  - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
  - (2) Monthly usage records of gallons used.
- (b) To document compliance with Condition D.1.4, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Condition D.1.4.
  - (1) The amount of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each month;
  - (4) The total VOC usage for each month; and
  - (5) The weight of VOCs emitted for each compliance period.
- (c) To document compliance with Condition D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Miller Door and Trim, Inc. Goshen, Indiana Reviewer Name: Melissa Groch First Minor Source Modification 039-12945-00155 Amended by: MES Page 27 of 35 OP No. T 039-7365-00155 Miller Door and Trim, Inc. Goshen, Indiana Reviewer Name: Melissa Groch First Minor Source Modification 039-12945-00155 Amended by: MES Page 28 of 35 OP No. T 039-7365-00155

#### D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Reviewer Name: Melissa Groch

First Minor Source Modification 039-12945-00155 Amended by: MES Page 30a of 35 OP No. T 039-7365-00155

#### **SECTION D.3**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]: Insignificant Activity

One (1) sanding machine, equipped with a baghouse for PM control, to be installed in 2001, capacity: 6,000 linear feet of wood door trim per hour (baghouse does not have to be in operation at all times).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sanding machine shall not exceed 4.48 pounds per hour when operating at a process weight rate of 2,283 pounds per hour (1.14 tons per hour).

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Miller Door and Trim, Inc. Goshen, Indiana

Reviewer Name: Melissa Groch

First Minor Source Modification 039-12945-00155 Amended by: MES Page 35a of 35 OP No. T 039-7365-00155

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

#### Part 70 Quarterly Report

Source Name: Miller Door and Trim, Inc.

Source Address: 1702 East Monroe Street, Goshen, Indiana 46526 Mailing Address: 1702 East Monroe Street, Goshen, Indiana 46526

Part 70 Permit No.: T 039-7365-00155

9

Facility: Automatic molding sprayer coating operation

Parameter: VOC Delivered to the Applicators

Limit: Less than twenty-five (25) tons per twelve (12) consecutive month

period

YEAR:	

Month	VOC (tons)	VOC (tons)	VOC (tons)
	This Month	Previous 11 Months	12 Month Total

9	INO	deviation	occurred	ın	tnis	montr	١.

Deviation/s occurred in this month.

Deviation has been reported on:

Submitted by:

Title/Position:

Signature:

Date:

Phone:

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Management

## Technical Support Document (TSD) for a Part 70 Minor Source Modification

#### Source Background and Description

Source Name: Miller Door and Trim, Inc.

Source Location: 1702 East Monroe Street, Goshen, Indiana

46526

County: Elkhart SIC Code: 2431

Operation Permit No.: T 039-7365-00155
Operation Permit Issuance Date: September 24, 1998
Minor Source Modification No.: 039-12945-00155
Permit Reviewer: Mark L. Kramer

The Office of Air Management (OAM) has reviewed a modification application from Miller Door and Trim, Inc. relating to the construction of the following emission units and pollution control devices:

- (a) One (1) automatic molding sprayer coating operation, equipped with three (3) dry filters in series, equipped with nine (9) HVLP spray applicators, exhausted through Stack F, to be installed in 2001, capacity: 3,000 liner feet of wood door trim per hour (filters do not have to be in operation at all times).
- (b) One (1) sanding machine, equipped with a baghouse for PM control, to be installed in 2001, capacity: 6,000 linear feet of wood door trim per hour (baghouse does not have to be in operation at all times).

#### History

On November 2, 2000, Miller Door and Trim, Inc. submitted an application to the OAM requesting to add a coating operation and sanding machine to their existing plant. Miller Door and Trim, Inc. was issued a Part 70 permit on September 24, 1998. A first minor permit modification was issued to the source on March 4, 1999.

Although the potential VOC emissions form this source modification exceed twenty-five (25) tons per year, this modification will be considered a minor source modification because the source has agreed to limit the actual VOC emissions to less than twenty-five (25) tons per year.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Stack Summary**

Stack ID	Operation	Height	Diameter	Flow Rate	Temperature
		(feet)	(feet)	(acfm)	(EF)

Miller Door and Trim, Inc.

Page 2 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

F	Surface Coating	17.0	1.33	1,766	68
	Operation				

#### Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 2, 2000. Additional information was received on via e-mail and telephone on December 5 and 6, 2000.

#### **Emission Calculations**

See pages 1 - 3 of 3 of Appendix A of this document for detailed emissions calculations.

#### **Potential To Emit of Modification**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	23.1
PM <sub>10</sub>	23.1
SO <sub>2</sub>	0.00
VOC	78.2
СО	0.00
NO <sub>X</sub>	0.00

HAPs	Potential To Emit (tons/year)				
Xylene	1.11				
Toluene	0.743				
MEK	2.23				
Formaldehyde	0.037				

Miller Door and Trim, Inc. Goshen, Indiana

Permit Reviewer: MLK/MES

TOTAL	4.12

Page 3 of 18 Source Modification: 039-12945-00155

Miller Door and Trim, Inc.

Page 4 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

#### **Justification for Modification**

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification to construct and a Minor Permit Modification will be issued to allow the source to operate the proposed modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(5) since the source has agreed to limit VOC emissions to less than twenty-five (25) tons per year.

#### **County Attainment Status**

The source is located in Elkhart County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Source Status**

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Miller Door and Trim, Inc.

Page 5 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

Pollutant	Emissions (tons/year)
PM	14.8
PM <sub>10</sub>	14.8
SO <sub>2</sub>	0.00
VOC	863
СО	0.00
NO <sub>X</sub>	0.00

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon Appendix A of the Technical Support Document of T 039-7365.

#### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Pollutant	<b>PM</b> (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO <sub>X</sub> (tons/yr)
Proposed Modification	0.208	0.208	0.00	<25	0.00	0.00
PSD Significant Level	25	15	40	40	100	40

Pursuant to 326 IAC 2-7-10.5(d)(5), the potential to emit VOC from the automatic molding sprayer coating operation is limited to less than twenty-five (25) tons per twelve (12) consecutive month period. Compliance with this VOC emission limit also makes the requirements of 326 IAC 2-2 not applicable. This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### **Federal Rule Applicability**

- (a) This significant modification does not involve a pollutant-specific emissions unit with the potential to emit after control in an amount equal to or greater than 100 tons per year. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

Miller Door and Trim, Inc.

Page 6 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification. The Wood Furniture NESHAP [40 CFR 63, Subpart JJ], does not apply to this source since it is an incidental wood furniture manufacturer pursuant to the definition on page 62938 of the Federal Register for 40 CFR Part 63, Wood Furniture Manufacturing Operations. The existing surface coating booths, identified as B-1 and B-2, and the proposed coating operation shall use no more than one hundred (100) gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components in order to render the requirements of 40 CFR Part 63, Subpart JJ not applicable.

#### State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New source toxics control)

The potential single and combination HAPs emissions from the proposed coating machine operation are 2.23 and 4.12 tons per year, respectively. Therefore, this proposed coating operation is not major for HAPs and thus this rule does not apply. Any change or modification which may increase potential single and combination of HAPs emissions to 10 and 25 tons per year, respectively, from the equipment covered in this permit shall obtain prior approval from IDEM, OAM before such change may occur.

#### 326 IAC 2-7-5(13) (Preventive Maintenance Plan)

- (a) A Preventive Maintenance Plan is required for the coating operation because VOC emissions are limited to render the requirements of 326 IAC 2-7-10.5(f) not applicable.
- (b) A Preventive Maintenance Plan is not required for the sand machine because:
  - (1) There is a control device for this facility, and
  - (2) The allowable PM emissions are less than ten (10) pounds per hour.

#### 326 IAC 6-3-2 (Process Operations)

(a) Coating Operation

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the coating operation shall not exceed 4.48 pounds per hour when operating at a process weight rate of 2,283 pounds per hour (1.14 tons per hour).

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The dry filters do not have to be in operation at all times that the coating process is in operation, in order to comply with this limit since the potential PM emissions before controls is 0.943 pounds per hour which is less than the allowable PM emission rate of 4.48 pounds per hour.

Miller Door and Trim, Inc. Goshen, Indiana Permit Reviewer: MLK/MES Page 7 of 18 Source Modification: 039-12945-00155 Miller Door and Trim, Inc.

Page 8 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

#### (b) Sanding Machine

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sanding machine shall not exceed 4.48 pounds per hour when operating at a process weight rate of 2,283 pounds per hour (1.14 tons per hour).

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

The baghouse does not have to be in operation at all times that the sanding machine is in operation, in order to comply with this limit since the potential PM emissions before controls is 4.34. pounds per hour which is less than the allowable PM emission rate of 4.48 pounds per hour.

#### 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furnishings shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

Since the proposed surface coating operations will utilize HVLP spray applicators, the modification will comply with this rule.

#### **Insignificant Activities**

As detailed above the proposed sanding machine qualifies as an insignificant activity, and will be listed as such in the modification, because:

- (a) The outlet grain loading of the baghouse is less than 0.04 grains per actual cubic foot of exhaust air and the flow rate is less than 4,000 actual cubic feet per minute.
- (b) Potential PM emissions are less than five (5) pounds per hour.

Additional insignificant activities resulting from this modification include PM emissions from unpaved

Miller Door and Trim, Inc.

Page 9 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

roads, and replacement or repair of bags in baghouses and filters in other air filtration equipment which have no specific rules.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this modification because the allowable emission with controls are less than ten (10) pounds per hour and the control devices are not required to comply with 326 IAC 6-3-2.

#### **Proposed Changes**

The permit language is changed to read as follows (deleted language appears as strikeouts and new language appears in **bold**):

- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

  This stationary source consists of the following emission units and pollution control devices:
  - (a) Two (2) surface coating booths, identified as B1 and B2, each with three (3) airless and air assisted airless spray guns. Emissions shall be controlled by dry filter, then exhausted at Stack/Vent ID #S1, S2, S3, S4, and S5.
  - (b) One (1) automatic molding sprayer coating operation, equipped with three (3) dry filters in series, equipped with nine (9) HVLP spray applicators, exhausted through Stack F, to be installed in 2001, capacity: 3,000 liner feet of wood door trim per hour (filters do not have to be in operation at all times).
  - (cb) Woodworking Operations with a maximum rating of 1000 pounds per hour. Emissions shall be controlled by baghouse dust collector and vented to the interior of the building.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

  This stationary source source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements. This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

Miller Door and Trim, Inc. Goshen, Indiana Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

One (1) sanding machine, equipped with a baghouse for PM control, to be installed in 2001, capacity: 6,000 linear feet of wood door trim per hour (baghouse does not have to be in operation at all times).

Page 10 of 18

Miller Door and Trim, Inc.

Page 11 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

#### SECTION D.1 FACILITY OPERATION CONDITIONS - Two (2) surface coating booths

#### Facility Description [326 IAC 2-7-5(15)]: Surface Coating Operations

- (a) Two (2) surface coating booths, identified as B1 and B2, each with three (3) airless and air assisted airless spray guns. Emissions shall be controlled by dry filter, then exhausted at Stack/Vent ID #S1, S2, S3, S4, and S5.
- (b) One (1) automatic molding sprayer coating operation, equipped with three (3) dry filters in series, equipped with nine (9) HVLP spray applicators, exhausted through Stack F, to be installed in 2001, capacity: 3,000 liner feet of wood door trim per hour (filters do not have to be in operation at all times).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3-2, the PM from each of the two (2) paint booths, identified as B1 and B2 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the automatic molding sprayer coating operation shall not exceed 4.48 pounds per hour when operating at a process weight rate of 2,283 pounds per hour (1.14 tons per hour).

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets furnishings shall utilize one of the following application methods:

Airless Spray Application Air Assisted Airless Spray Application Electrostatic Spray Application Electrostatic Bell or Disc Application Heated Airless Spray Application Roller Coating Miller Door and Trim, Inc.

Page 12 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

Brush or Wipe Application Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.3 Usage Limit

To avoid applicability of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14 (40 CFR Part 63, Subpart JJ), the surface coating booths, identified as B-1 and B-2, **and the automatic molding sprayer coating operation** shall use no more than **one hundred** (100) gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. This limit is established in the definition of an incidental wood furniture manufacturer, pursuant to 40 CFR Part 63, Subpart JJ.

#### D.1.4 Volatile Organic Compounds (VOC) [326 IAC 2-7-10.5(d)(5)]

Pursuant to 326 IAC 2-7-10.5(d)(5), the potential to emit VOC from the automatic molding sprayer coating operation is limited to less than twenty-five (25) tons per twelve (12) consecutive month period. Compliance with this VOC emission limit also makes the requirements of 326 IAC 2-2 not applicable.

#### D.1.5 New Source Toxics Control [326 IAC 2-4.1-1]

Any change or modification which may increase potential single and combination of HAPs emissions to 10 and 25 tons per year, respectively, from the automatic molding sprayer coating operation shall obtain prior approval from IDEM, OAM before such change may occur.

#### D.1.64 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for **these facilities** this facility and any control devices.

Compliance Determination Requirements

#### D.1.75 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the limit specified in Condition D.1.1 shall be determined by performance tests conducted in accordance with Section C- Performance Testing.

#### D.1.86 VOC Emissions Volatile Organic Compounds (VOC)

Compliance with the VOC usage limit contained in Condition D.1.3 shall be determined through record keeping. Compliance with Conditions D.1.3 and D.1.4 shall be demonstrated within 30 days of the end of each month based on the total finishing material or adhesives used in the manufacture of wood furniture or wood furniture components and the volatile organic compound usage for the month.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Miller Door and Trim, Inc. Goshen, Indiana

Permit Reviewer: MLK/MES

Page 13 of 18 Source Modification: 039-12945-00155

The dry filters for PM control shall be in operation at all times in order to comply with Condition **D.1.1(a)** when the two (2) paint booths, identified as B1 and B2 are in operation.

Miller Door and Trim, Inc.

Page 14 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

#### D.1.**10**8 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)]

#### D.1.**119** Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, the Permittee shall maintain on site records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be complete and sufficient to establish compliance with the usage limits established in Condition D.1.3.
  - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
  - (2) Monthly usage records of gallons used.
- (b) To document compliance with Condition D.1.4, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Condition D.1.4.
  - (1) The amount of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each month;
  - (4) The total VOC usage for each month; and
  - (5) The weight of VOCs emitted for each compliance period.

Miller Door and Trim, Inc. Goshen, Indiana Permit Reviewer: MLK/MES Page 15 of 18 Source Modification: 039-12945-00155

Miller Door and Trim, Inc.

Page 16 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

(cb) To document compliance with Condition D.1.108, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(de) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.1.12 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activity

One (1) sanding machine, equipped with a baghouse for PM control, to be installed in 2001, capacity: 6,000 linear feet of wood door trim per hour (baghouse does not have to be in operation at all times).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sanding machine shall not exceed 4.48 pounds per hour when operating at a process weight rate of 2,283 pounds per hour (1.14 tons per hour).

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E =rate of emission in pounds per hour and P =process weight rate in tons per hour

Miller Door and Trim, Inc.

Goshen, Indiana

Permit Reviewer: MLK/MES

Page 17 of 18 Source Modification: 039-12945-00155

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

#### Part 70 Quarterly Report

Source Name: Miller Door and Trim, Inc.

Source Address: 1702 East Monroe Street, Goshen, Indiana 46526 Mailing Address: 1702 East Monroe Street, Goshen, Indiana 46526

Part 70 Permit No.: T 039-7365-00155

Facility: Automatic molding sprayer coating operation

Parameter: VOC Delivered to the Applicators

Limit: Less than twenty-five (25) tons per twelve (12) consecutive month

period

YEAR: \_\_\_\_\_

	VOC (tons)	VOC (tons)	VOC (tons)		
Month	This Month	Previous 11 Months	12 Month Total		

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.

Deviation has been reported on:

Submitted by:

Title/Position:

Signature:

Date:

Phone:

Attach a signed certification to complete this report.

Miller Door and Trim, Inc.

Page 18 of 18
Goshen, Indiana

Source Modification: 039-12945-00155

Permit Reviewer: MLK/MES

#### Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 039-12945-00155.

Page 1 of 3 TSD App A

#### Appendix A: Emissions Calculations VOC and Particulate From Surface Coating Operations

Company Name: Miller Door and Trim, Inc.

Address City IN Zip: 1702 East Monroe Street, Goshen, IN MSM: 039-12945

MSM: 039-12945 Plt ID: 039-00155 Reviewer: Mark L. Kramer

Date: November 2, 2000

HVLP	
Applicator	

Material on wood substrate	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Surface Coating - 1st Pass								(100 lin ft)								
Sherwood Custom Wiping Stain	6.38	95.40%	0.0%	95.4%	0.0%	2.30%	0.07810	30.000	6.09	6.09	14.26	342.26	62.46	0.75	264.63	75%
Vinyl Sealer Clear	7.24	79.20%	0.0%	79.2%	0.0%	14.20%	0.07810	30.000	5.73	5.73	13.43	322.44	58.85	3.86	40.38	75%
Subtotal 1st Pass											27.70	664.70	121.31	4.62		
																i i
Surface Coating - 2nd Pass																
Precat Lacquer MRE Clear	7.47	70.60%	0.0%	70.6%	0.0%	16.50%	0.05050	30.000	5.27	5.27	7.99	191.76	35.00	3.64	31.96	75%
								PM	Control Efficiency	98.65%						

50% Pass 1 + 50% Pass 2 Uncontrolled 17.84 428.23 78.15 4.13 50% Pass 1 + 50% Pass 2 Controlled 17.84 428.23 78.15 0.056

 VOC
 Limited to <</th>
 25.00
 to remain minor mod.

 PM
 After VOC Limit
 0.018

#### State Potential Emissions

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lbs/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

### Appendix A: Emission Calculations HAP Emission Calculations

Page 2 of 3 TSD APPA

Company Name: Miller Door and Trim, Inc.

Address City IN Zip: 1702 East Monroe Street, Goshen, IN

MSM: 039-12945 Plt ID: 039-00155

Reviewer: Mark L. Kramer

Date: November 2, 2000

		Gallons of						Xylene	Toluene		Formaldehyde
Material on wood substrate	Density	Material	Maximum	Weight %	Weight %	Weight %	Weight %	Emissions	Emissions	MEK Emissions	Emissions
	(lbs/gal)	(gal/unit)	(unit/hour)	Xylene	Toluene	MEK	Formaldehyde	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Surface Coating - 1st Pass											
Sherwood Custom Wiping Stain	6.38	0.07810	30.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Vinyl Sealer Clear	7.24	0.07810	30.000	3.00%	2.00%	6.00%	0.10%	2.23	1.49	4.46	0.07
Subtotal 1st Pass								2.23	1.49	4.46	0.07
Surface Coating - 2nd Pass											
Precat Lacquer MRE Clear	7.47	0.05050	30.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
						50% 1st Pass	+ 50% 2nd Pass	1.11	0.743	2.23	0.037
METHODOLOGY Total HAPs						Total HAPs	4.12				
		Limited HAPs by ratio of 25 TPY VOC limit to PTE of 78.15 TPY						0.357	0.238	0.713	0.012
Total Limited HAPs						1.32					

HAPS emission rate (tons/yr) = Density (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

### Appendix A: Emission Calculations Baghouse Operations

Company Name: Miller Door and Trim, Inc.

Address City IN Zip: 1702 East Monroe Street, Goshen, IN

MSM: 039-12945 Plt ID: 039-00155 Reviewer: Mark L. Kramer

Date: November 2, 2000

Unit ID	Control	Grain Loading per Actual	Gas or Air	Emission Rate	Emission Rate	Emission Rate	Emission Rate
	Efficiency	Cubic foot of Outlet Air	Flow Rate	before Controls	before Controls	after Controls	after Controls
	(%)	(grains/cub. ft.)	(acfm.)	(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)
Sanding	99.0%	0.010	506.0	4.34	19.00	0.043	0.190

#### Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains) Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency) Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

#### **Allowable Rate of Emissions**

Process Rate	Process Weight Rate	Allowable Emissions	Allowable Emissions
(lbs/hr)	(tons/hr)	(lbs/hr)	(tons/yr)
2283	1.14	4.48	19.6

#### Methodology

Allowable Emissions = 4.10(Process Weight Rate)^0.67